

Docket No. AUS920030189US1

ABSTRACT OF THE DISCLOSURE

INFINIBAND SUBNET MANAGEMENT QUEUE PAIR EMULATION FOR MULTIPLE LOGICAL PORTS ON A SINGLE PHYSICAL PORT

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A Host Channel Adapter supporting a plurality of Logical Partitions is provided. A Subnet Manager, having an associated aliased Queue Pair, may run in a Logical Partition. A single physical subnet management Queue Pair and its associated firmware are provided for each physical port in the Host Channel Adapter. If a packet is to be routed to a Subnet Manager residing in a Logical Partition, the packet is enqueued on the physical port's send queue for transmission to the aliased Queue Pair for the Subnet Manager. The Host Channel Adapter hardware loops the packet back to the aliased Queue Pair in the appropriate Logical Partition. The aliased Queue Pair is also capable of transmitting packets that are looped back to a Hypervisor Subnet Management Agent.

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